



Project:
Maternal Fetal Medicine Unit in
Hospital José María Benítez, La
Victoria

Rotary La Victoria
District 4370
Venezuela



ROTARY LA VICTORIA

DISTRICT 4370 - VENEZUELA

Project:

Maternal Fetal Medicine Unit of the José María Benítez Hospital in La Victoria,
Aragua State, Venezuela.

Presented by:

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Rotary La Victoria

Introduction

Through this project, we formally start a dream, a service opportunity that will be called the "Maternal Fetal Medicine Unit of the José María Benítez de La Victoria Hospital", which we will know by the acronym MFMU and with which we intend to carry out community a high-tech medical service that will be a pillar of maternal care in the eastern region of Aragua State, to provide support to clinical obstetric work, and with which health statistics will improve at the regional level in the line fetal-maternal.

In addition, the MFMU is thought of as a pioneering unit with a high social and community sense and will be the engine for the development of multiple scientific investigations and the area for the training of personnel who will be trained to perform high-level obstetric ultrasounds, in addition to training of the interpretation of fetal well-being tests and early diagnosis of embryonic and fetal health, which will be a fundamental pillar in the modernization of our obstetrics service to adapt to the technological changes that XXI century medicine has imposed on us, and thus become a key player in improving the health of mothers in our region and their offspring.

The MFMU will have three basic links that will allow us better access to maternal health and that will support high-risk prenatal consultation and the obstetrics and gynecology service with its hospitalized patients with risk pregnancies: these are the following: 1.- Perinatal Ultrasound Service, 2.- Electronic Fetal Monitoring Service and 3.- Research and Teaching Area, all these activities will be explained in the development of this project.

Our vision is excellence in the provision of a highly modern care-oriented health service with state-of-the-art technology in the area of maternal care, providing a free, effective, social service to those mothers who cannot afford high medical costs, serving as support to gynecologists and general practitioners in the area in terms of risk stratification of their patients and adapted medical management to international care standards based on scientific medical evidence to provide an obstetric service based on the quality of service with a high social vision.

The problem...

1. Thousands of women get pregnant every year in Venezuela, a country where 80% of the population lives in poverty, with the critical poverty line being around 45%, according to figures given by the same Government of the Bolivarian Republic of Venezuela.
2. Most of these women do not have access to quality healthcare.
3. The city of La Victoria, located in the State of Aragua, in the heart of Venezuela, has an area of influence of approximately 800,000 people, and José María Benítez Hospital is the one that receives the majority of pregnant women in a situation of critical poverty.
4. Currently, the Benítez Hospital does not have any risk pregnancy unit, but rather a general maternity service with low technological support, so fetal and neonatal diseases generally end in the death or disability of hundreds of children, a fact that was denounced by the same community to the competent authorities, but with little government response.
5. Doctors and nurses in the maternity area fight against pregnancy and fetal diseases without supplies or equipment with modern technology, so they need support from non-governmental institutions so that they can hear the cries of those pregnant women who need a helping hand so much. that helps them to be served in a better way.
6. Fetal and neonatal mortality is the third cause of death in Venezuela, and therefore, in Aragua State.
7. Prematurity, hypertensive problems during pregnancy, gestational diabetes, and puerperal and neonatal infections are the problems that most afflict our pregnant patients. Many of the cases that occur daily could have been detected in the prenatal control, and due to the lack of a service like the one proposed in this project, they could not be avoided.
8. Of the total number of pregnant women, 40% are adolescents and 30% are older than 35 years.
9. Throughout Venezuela, perinatal morbidity and mortality are recognized as a public health problem, but there are few subspecialists in Maternal Fetal Medicine (perinatologists) available in the country, so risk patients are in the hands of obstetrician-gynecologists who know about diseases and management, but due to the country's socio-economic situation, they have little access to state-of-the-art technology.

10. A healthy childhood originates from a healthy pregnancy, and a healthy society comes from a healthy childhood, so we must protect our pregnant women to achieve the development of our community.

Our dream...

Form the MFMU, which will have highly trained personnel and high-tech medical equipment to care for the population of pregnant women at risk in our region and thus serve as carriers of scientific knowledge that train more personnel who can serve as perinatal service providers high level in other cities.

Mission

The Mission of the MFMU is the resolution of regional reproductive and perinatal health problems, through support to the community in the area of care for high-risk pregnancies, basic scientific, clinical, and epidemiological research, and high-level social medicine of excellence, which allows the development of care models and technological innovation for health. Its mission is also the academic training and development of human resources, with solid technical, ethical, and humanistic preparation, based on scientific evidence and documented experiences, according to the demands of the health sector, as well as highly specialized health care and with quality, positioning it as an advanced regional model of perinatal care. Promote and generate knowledge in the field of reproductive health, provide scientific support for care actions that reduce maternal and perinatal morbidity and mortality and stimulate the possibility of pregnancy through the development of research and the training of resources that benefit women and neonates that require tertiary level care.

Vision

The MFMU must be the regional leader in high-level scientific research, oriented towards specific missions, the training of the highest quality human resources, and excellent medical care, which impacts regional health indicators and contributes not only to reducing the epidemiological backlog, but to efficiently face emerging problems in reproductive and perinatal health, and contribute to increasing the health, quality of life and well-being of women, girls, and boys, the central axis of the family.

MFMU Assistance Areas

1.- Perinatal ultrasound

Through this area, paraclinical support will be provided through ultrasound or third level ultrasound, performed by an obstetrician-gynecologist with formal university subspecialty training in Maternal Fetal Medicine (Perinatology) who will be in charge of managing this unit the objectives in fetal-maternal health that have been established by the authorities of the Gynecology and Obstetrics Service of the José María Benítez Hospital, it's General Directorate, as well as by the reproductive health missions promoted by the Government of the Bolivarian Republic of Venezuela and by Corposalud in Aragua State.

This area will be in charge of carrying out the following tasks in terms of perinatal care:

1. Perform early screening for chromosomopathies in pregnant patients at risk.
2. Perform early screening for fetal malformations with third-level ultrasound evaluation during the second trimester of pregnancy.
3. Perform the diagnosis of fetal health in high-risk pregnant patients during the third trimester of pregnancy, through ultrasound techniques known as fetal biophysical profile, fetal-placental hemodynamic profile (fetal ultrasound Doppler and other ultrasound techniques that allow access to knowledge paraclinical study of the health of the fetus and the mother.
4. Prevent the appearance of fetal and maternal diseases through the search for early ultrasound signs of risk for diseases such as pregnancy-induced arterial hypertension, preeclampsia, eclampsia, and fetal growth restriction.
5. Refer to primary (general sonographers) or secondary (gynecologist sonographers) levels for those patients without obstetric risk or with risk factors that do not warrant care in a tertiary hospital (subspecialists in Maternal Fetal Medicine).
6. Offer perinatal suggestions that help the obstetric team to better manage patients with these high-level technological tools.
7. Help in the individualization of each particular clinical case, being the promoter of joint sessions with other care services within the hospital such as the pediatric service, nursing, pediatric neurology,

pediatric cardiology, neonatologists, social workers, and all the staff. health equipment that is necessary in each case.

8. Serve as support for training in third-level ultrasound in Obstetrics and Gynecology for medical and nursing staff who want to train and investigate in the perinatal area.

Thus, the ultrasound area is a fundamental paraclinical pillar in modern obstetrics, and through the formation of the MFMU, we will be able to direct high-risk patients to treat them appropriately, ultrasound being an important support in the diagnosis of pathologies and in perinatal risk stratification.

2.- Electronic Fetal Monitoring Area

Since the mid-1970s, hospitals and private clinics worldwide have had electronic fetal monitoring for the surveillance of high-risk pregnancies, as well as for the care of high-risk deliveries. This already standardized methodology and with a fundamental use in obstetric care will be carried out by our MFMU, mainly to patients with medical pathologies (hypertension, diabetes mellitus, etc.) or surgical pathologies (post-operative, etc.) and with pregnancies over 32 weeks, so that their pregnancies culminate in correct obstetric care, thus reducing the increased morbidity typical of high-risk pregnancy.

We will perform the following types of electronic fetal monitoring:

1. Non-Stress Electronic Fetal Monitoring, or better known as Non-Stress Test.
2. Stressful electronic fetal monitoring (Posse Test, monitoring of threats of preterm labor, monitoring of hospitalized patients with placenta previa).
3. Electronic monitoring during labor.

Through electronic fetal monitoring, fetal vital signs such as the variability of their heartbeats are measured and compared with their movements and uterine activity, which gives the perinatologist a highly specific orientation of fetal health.

It is the intention of the MFMU to serve as support to the obstetricians and gynecologists of the Benítez Hospital in terms of risk delivery care, promoting the use of the electronic monitor as a high-level diagnostic tool during labor of high-risk pregnant women. This technique has served worldwide to minimize fetal morbidity and mortality in first world countries, which we intend to implement in the HJMB Gynecology and Obstetrics Service, socializing this type of high-level obstetric care.

3.- Research and Teaching Area

Within the structure that we plan at MFMU, advanced human and technological resources are integrated that allow us to offer the highest quality care in fetal diagnosis and therapy. Following the institutional mystique of teamwork, the MFMU will work jointly with the services of Pediatrics, Pediatric Cardiology, Neurology, Infectious Diseases, Neonatology, Nursing, Psychology and Social Work. The result is a multidisciplinary team that will place our Hospital at the forefront of clinical care for fetal pathology. The MFMU will also serve in the training of human resources, supporting the undergraduate Medicine program of the University of Carabobo and with the futuristic vision of training gynecologists in the perinatal area. The assistance and teaching programs will be supported by a clinical research program that will allow us to generate scientific knowledge aimed at solving priority maternal-fetal health problems.

Being a new unit in the region, eager for high caliber scientific knowledge, we will be promoters of medical evidence that we hope will be known in the country and beyond our borders and thus support other hospitals with the information that comes out of our unit, always with high standards of professional ethics, respecting fetal and maternal life and prosecuted in the Helsinki Standards regarding scientific research in humans.

The primary intention of the MFMU will be to socialize scientific research, serving as a promoter of research that in our environment serve to adapt to the modern scientific world.

Human Resources necessary for the formation of the MFMU.

1. Obstetrician and Gynecologist subspecialist in Maternal Fetal Medicine (Perinatologist).

Must be an Obstetrician-Gynecologist recognized by a National Medical Association with a two-year Subspecialty in Maternal-Fetal Medicine conducted at a national or foreign University, with great social vision and demonstrated skills in the area of clinical research and professional leadership.

2. Gynecologist with knowledge and training in obstetric ultrasound and with the desire to remain in the perinatal area.

3. Assistant resident physician.

That will rotate through the service and will be in charge of conducting the interviews, filling out the patient histories and transcribing the results of the ultrasound and electronic monitoring.

4. Nurse

It will be in charge of supporting the doctor in the area of electronic monitoring and providing nursing care to patients at risk. She organizes the medical consultation and will be in charge of teaching and research in the perinatal nursing area.

5. Cleaning staff.

Both medical and nursing staff will seek training in the area of fetal echocardiography, fetal neurosonography, cervicometry and perinatal Doppler, in national and international certified courses.

Material Resources necessary for the formation of the UPLV

1. Ultrasound equipment that meets the following technical characteristics:

to. Minimum 15-inch high-resolution monitor

b. High quality harmonic image.

c. 3D image and volumetric 4D.

d. Color Doppler, continuous, pulsed and Angiopower.

and. Capacity for 2-12 Mhz transducers, one convex, one transvaginal and one volumetric.

F. cinema loop

g. B-mode, M-mode and 3D imaging capability

h. Different zoom levels.

Yo. Ultrasound thermal printer.

j. High density printing thermal paper.

k. Team base.

he. Electricity protector.

2. Three Electronic Fetal Monitoring devices that meet the following characteristics:

to. Doppler Fetal Heart Rate Transducer

b. Uterine Activity Transducer or external tocodynamometer

c. Fetal Activity Meter

d. Fetal Vibroacoustic Stimulator.

and. Ability to work with thermal paper available in the country.

3. A computer equipment that has the following characteristics.

to. Processor suitable for current requirements

b. Internet connection capacity

c. Media kit

d. Color printer with its ink cartridges

4. Two stretchers for patients

5. 8 office chairs

6. A blood pressure monitor, stethoscope.

7. Basic stationery.

Global Grant Budget

Item	Budget USD
Ultrasound 5D	46800
Divan CHIk44	620
Divan ARTIK	280
Air- Conditioning Split 18000 BTU	515.20
Secretarial medical desk	125
Secretarial nurses desk	125
2 desk chairs	120
6 visitors chairs	270
2 desktop PC	1460
2 laser wifi printer	290
Electronic fetal monitoring device.	1500
2 boxes of paper for printer	140
File cabinet	235
Book cabinet	420
2 buckets of White paint	200
UPS 1500 va/900 wa	120
Training course for doctors	6000
Video Beam	250
Tensiometer	150
Wheight and stature cale	600
TOTAL	60020.2

What do we currently have to carry out the project?

We have the willingness of the management staff of Hospital Benítez and the Head of the Gynecology and Obstetrics Service of the same center. We have been promised that by having the necessary medical equipment available, we will be given a physical area for the operation of the unit.

We currently have the basic ultrasound equipment (general state of the equipment with damage to the crystals of a convex transducer, equipment with low resolution and with little time of use). We started a year ago with the opening of a consultation in these conditions to create the need within the hospital service, and also to learn first-hand about the needs of the hospital.

Rotary La Victoria requests:

- One or several sponsoring Rotary clubs, together with their districts in order to assign the project number and start the formation process of the UMMFLV.
- These clubs will have direct access to the entire creation process of the UMMFLV, they can even promote the interest of the project in their countries and thus help so many mothers in need.
- The enthusiasm of fellow Rotarians worldwide, since there will be many lives that a service of this type can touch and improve not only their health, but that of the families of the users and their communities.

How we plan to perform this Rotary Foundation Global Grant.

Estimated budget USD 60,020

Rotary and Rotaract La Victoria USD 5,020

DDF 4370 USD 5,000

Sponsoring Districts and TRF USD 50,000.

The sustainability of the project is guaranteed since the Maternal Fetal Medicine - Perinatology Unit will be inside and will be part of the facilities of the José María Benítez Hospital, an institution that will be in charge of maintaining the equipment and its doctors and nurses will operate it.

Our strengths to give solidity to the project are the following:

1. The physical space where the medical consultation will operate will be at the José María Benítez de La Victoria Hospital.
2. The sustainability of the project is guaranteed, since the personnel that will operate the fetal medicine unit will be hired by the same hospital, which depends on the state government.
3. We have already carried out conversations with authorities of the municipality and of the State of Aragua to commit to the maintenance of the physical area and the protection of medical equipment.
4. Rotary La Victoria, as well as District 4370 and the sponsoring clubs and districts will have access to the Maternal Fetal Medicine Unit, to learn about and collaborate in its proper functioning, have access to the social impact in the community, and meet and support the staff who work in medical consultation.

For us, Rotarians of La Victoria, saving a single baby is more than enough to justify carrying out the project. Now, programming a healthier society by positively influencing the health of all babies of mothers with high obstetric risk, will be a great step to improve our community.

Within the area of interest of "Maternal and Child Health", our project will be the spearhead to promote the ideal of our Rotary Foundation.

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